



# **INFORMATIONAL ADVERTISING IN THE CONTEXT OF SUSTAINABLE FASHION**

*The influence of information usage in advertising on  
consumers' perceptions and willingness to purchase*

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## ABSTRACT

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With the current situation of our modern society's fast-changing desires and overconsumption, researchers and environmentalists agree that a change is needed and developing more sustainable behaviors is essential. This includes how we produce and consume clothing. Sustainable fashion is a rather new, but an increasingly emerging concept. Yet, not enough knowledge is available about the topic in the fashion industry. This current study aims to examine the usage of informational advertising in the context of sustainable fashion and its implications for consumers. Based on prior academic literature about sustainability in the fashion industry, about consumer knowledge and marketing communications, an experimental study design was performed to examine how different advertising scenarios with varying information inputs impact consumers' willingness to purchase sustainable fashion. Consumers' aesthetic and quality perceptions about the concept are also analysed. Results show that including information in advertising has a positive effect on quality perceptions and boosts the willingness to purchase sustainable fashion. Hence, this present dissertation contributes to a better understanding of consumers' needs and motivations to engage in more sustainable buying behaviors. Furthermore, the dissertation provides important implications for marketers to promote sustainable fashion purchases and contributes to marketing literature in the context of sustainable consumption.

## RESUMO

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Com a situação atual da nossa sociedade moderna, os seus desejos e consumo excessivo, investigadores e ambientalistas concordam que uma mudança nestes hábitos é essencial assim como o desenvolvimento de comportamentos mais sustentáveis. Isso inclui a maneira como nós produzimos e consumimos artigos de roupa. A moda sustentável é um conceito novo, mas cada vez mais emergente. No entanto, não há conhecimento suficiente e satisfatório sobre este segmento na indústria da moda. Assim sendo, esta dissertação tem como objetivo examinar o uso da informação em publicidade no contexto da moda sustentável e suas implicações para os consumidores. Baseado na literatura académica sobre sustentabilidade e a indústria da moda, o conhecimento do consumidor e a comunicação de marketing, foi criado um estudo experimental para analisar cenários publicitários com informações variadas e os seus efeitos sobre a disposição do consumidor em comprar produtos de moda sustentável, bem como suas percepções estéticas e de qualidade sobre este conceito. Os resultados mostram que a inclusão de informação na publicidade tem um efeito positivo nas percepções de qualidade e também aumenta a vontade de comprar produtos de moda sustentável. A presente tese é assim, uma contribuição para se melhor entender as necessidades dos consumidores, e as suas motivações para que haja um compromisso duradouro com vista ao comportamento de compra mais sustentável. Além disso, a dissertação fornece importantes implicações para as marcas promoverem as compras de moda sustentável e contribui também, para a literatura de marketing sustentável.

## ACKNOWLEDGEMENTS

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# 1. INTRODUCTION

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## 1.1 Problem Definition and Relevance

*“There is no beauty in the finest cloth if it makes hunger and unhappiness.”*

*Mahatma Gandhi, leader of the Indian independence movement in British-ruled India*

*“Fast fashion isn't free. Someone, somewhere is paying”*

*Lucy Siegle, British journalist and writer on environmental issues*

No other industry must cope with continuous change and therefore constantly requires adaptations such as the fashion industry. Fast fashion has evolved to play a major part in the sector leading to an even higher importance of adjusting quickly to current trends, causing clothing collections to be updated almost on a weekly basis. This excessive supply of apparel has led to the fashion industry being the world's second most polluting industry after oil (Conca, 2015). At the same time the awareness of sustainability and the environmental impact of the present consumption trends has risen among consumers (Joshi and Rahman, 2015). Additionally, the tragic collapse of the Rana Plaza building in Bangladesh in 2013, causing the death of more than 1,100 factory workers, was an awakening call for many consumers to rethink their fashion purchases and made people more aware not only of the environmental, but also the social impacts of the fashion industry. Accordingly, the shift in societal consciousness has led some designers and fashion stores to start offering sustainable fashion options as part of their collections. But why are the negative impacts of the aforementioned social and environmental crises still a minor contribution to the buying behavior change that is observed among fashion consumers? Is there a threshold in the level of consumer awareness only beyond which there is a sustainable change? A vast amount of research studies tries to understand what prevents consumers to purchase sustainable products despite their positive attitude towards it (Hiller Connell, 2010; Young et al., 2010; Joshi and Rahman, 2015; Vermeir and Verbeke, 2006). Literature points out several reasons for this discrepancy, such as that the aesthetic consumer preferences do not match the sustainable fashion items features or the limited availability of fashion stores that sell sustainable garments (Hiller Connell, 2010).



Another frequently mentioned preventing factor is the lack of consumers' knowledge about the sustainability topic (Hiller Connell, 2010). While this limitation has been acknowledged by previous literature (Hiller Connell, 2010; Padel and Foster, 2005; Joshi and Rahman, 2015), insufficient focus has been drawn on how to overcome this barrier to increase sustainable consumption. From a marketer's perspective, it is important to understand what measures are available and how to make use of them to help overcoming those hurdles. As proposed by Hunt (1976), including information into a company's advertising message can not only educate the consumer but also persuade an individual leading to the consumption of the advertised product. Therefore, it is necessary to examine the possible advertising techniques that may enlighten the consumer about the sustainable consumption topic. For the purpose of this thesis the focus will be drawn on informational advertising with the goal to not only evaluate its effectiveness but to find recommendations for advertising messaging in the context of sustainable fashion in the future.

## 1.2 Research objective

So far, only limited advertising efforts in the field of sustainable products have been used as a tool to promote a change in buying behavior (Peloza et al., 2013). As such, the aim of this study is to explore the influence and the impact of information used in advertising on consumers' overall perceptions (aesthetics and quality) and willingness to purchase sustainable fashion items. In particular, this present research focuses on information-type usage as suggested by Kaiser and Fuhrer (2003). Therefore, the research objective consists of detecting potential differences in the likeliness of purchasing sustainable fashion depending on the type of information that is provided by the advertisements to consumers. Moreover, the study intends to understand what information combination pieces are most effective when trying to promote sustainable fashion consumption. Finally, another research objective is to detect the influence of information on willingness to purchase, quality and aesthetic perceptions when consumers are differentiated with respect to their prior knowledge and product experience. To summarize, the following research questions aim to be answered:

R.Q. 1: Can informational advertising influence consumers' willingness to purchase sustainable fashion?

R.Q. 2: Can informational advertising (also) reach out to consumers without prior experience or knowledge of sustainable fashion and increase their willingness to purchase?

## 2. LITERATURE REVIEW

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### 2.1 Sustainability and the fashion industry

When dealing with the topic of sustainable fashion one must begin with understanding what sustainability is and what the underlying ideas mean. While there are many definitions for the term “sustainability”, the concept is often described as complicated and vague (Faber et al., 2005). One of the most common definitions is provided by the World Commission on Environment and Development (1987) where “*sustainability means being able to satisfy current needs without compromising the possibility for future generations to satisfy their own needs.*” Building on this concept, Seidman (2007) suggests that sustainability not only focuses on the relationship with the environment, but also on the relationship with oneself, the communities and institutions. Furthermore, the concept of sustainability has been explained by acknowledging the relationship between the three important pillars: economic, environmental and social (Bansal, 2002). This idea is based on the concept of the “triple bottom line” (Elkington, 1998) being the main driver directed to the economic, environmental and social perspective of the business. With regard to sustainability, the economic pillar requires a sufficient supply of resources in order to guarantee and maintain a satisfying quality of life, an environmental principle that asserts societies with adequate treatment and protection of the environment and a social principle that focuses on equal fair treatment (Bansal, 2002 cited in Caniato et al., 2012, p. 660).

As previously mentioned, it can be stated that the concept of sustainability in the fashion industry is still vague and numerous definitions have been used (Lundblad and Davies, 2016). On the one hand, Cervellon et al. (2010) state that sustainable fashion is often linked to terms such as ethical, fair trade, organic, slow, green, recycled and so forth. On the other hand, Joergens (2006) defines “ethical fashion” as fashion clothing that is produced in fair and sweatshop-free labour conditions with the objective of reducing the damage of the processes on the environment. Cervellon and Wernerfelt (2012) describe the same concept as “green fashion”. For the purpose of this present research the aforementioned term will be referred to as sustainable fashion.

When looking at sustainability in the context of the fashion industry it is important to understand that the three pillars are conjointly colluding as all the aforementioned aspects are present when one considers the sourcing of the fabrics, the production of clothes and finally the sales to the final consumer. Regarding the act of consumption, Hiller Connell (2011) defines

the following behaviors, among others, as sustainable: purchasing clothes fabricated with recycled materials or ecological fibers, purchasing clothes from eco-conscious companies and only when needed; making use of the clothing item for as long as possible, purchasing second-hand clothes, donating items and reusing old clothing. As it can be seen from these explanations, the concept of sustainable fashion comprises several activities that are important for consumers to be aware of and to understand how to execute them in order to enable fashion shoppers to engage in more sustainable consumption activities.

### ***2.1.1 Consumers relation with sustainable fashion***

The total consumption of goods and services has increased tremendously over the last decade which contributed to fatal damages in the environment and the depletion of natural resources (Chen and Chai, 2010). Part of these negative consequences can be imputed to the fashion industry since it is the world's second largest industrial polluter after oil and accounts for 10% of global carbon emissions (Conca, 2015). Due to the increasing demand for synthetic fibers in the clothing industry production, an increasing excess of toxic chemicals such as carbon monoxide used for the fabrication is discharged into the environment (Shen et al., 2012). Not only has consumer awareness about environmental but also human exploitation started to increase over the last decades; furthermore, public scandals about major companies such as Nike or Levi Strauss employing sweatshop labor have been in the public eye (Shen et al., 2012). Consequently, recent research about consumer behavior in the context of sustainable fashion shows that this growing awareness of environmental issues leads to increased ethical consumer concerns about their fashion consumption (Niinimäki, 2010). Due to these facts, consumer demand has not stayed unnoticed and global fashion companies such as H&M or MUJI have started to include sustainable clothing alternatives in their collections (Shen et al., 2012). Though consumers understand the importance of revising their purchasing choices towards more green products, the statistics show evidence that there is no actual change in buying behavior (Joshi and Rahman, 2015).

### ***Theory of Planned Behavior***

A frequently used construct when analysing green purchasing behavior is the Theory of Reasoned Action (TRA) by Ajzen and Fishbein (1980). According to the TRA the two main factors that influence individual behavior are personal attitude and subjective norms. Attitude

can be described as a personal evaluation of a certain behavior and subjective norms are defined as the influence of social pressure on one's behavior (Ajzen and Fishbein, 1980). Ajzen (1991) later modified the concept by adding one more variable – perceived behavioral control – which is defined as the perceived control an individual has over his/her purchasing. This adapted concept called Theory of Planned Behavior (TPB actions, see Figure 1) has been used in prior research exploring attitudes, intentions and the actual buying behavior of sustainable consumption (Tanner and Kast, 2003; Arvola et al., 2008; Smith and Paladino, 2010). Yet, some flaws in TPB have been pointed out by some researches (Tanner and Kast, 2003; Vermeir and Verbeke, 2006; Vermeir and Verbeke, 2008 cited in Joshi and Rahman, 2015, p. 129), since there are discrepancies between the attitudes consumers express and their actual buying practices. This concept is also known as the attitude-behavior gap (Young et al., 2010) or ethical purchase gap (Nicholls and Lee, 2006). In most studies the assumed conclusion that environmental awareness leads to environmental attitudes, which consequently leads to environmental behaviors, has been shown to be inaccurate (Kollmuss and Agyeman, 2002). Consumers tend to provide certain socially desirable attitudes in order to be viewed favourably by others, whereas their actual buying behavior does not reflect these attitudes (Lea-Greenwood, 1999).

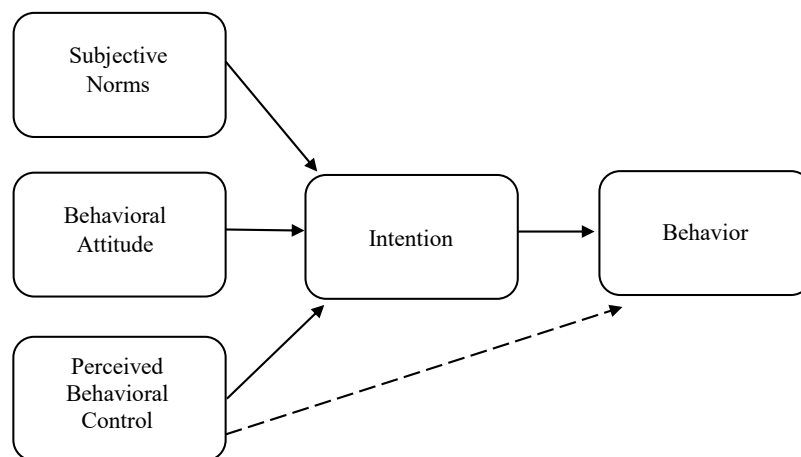


Figure 1: Theory of Planned Behavior

Source: adapted from Ajzen (1991)

### 2.1.2 Factors preventing sustainable fashion consumption

The nature of sustainable fashion consumption is yet a field of research that needs to be examined in more depth since the topic of consumer decision making remains unsatisfactorily explored (Hiller Connell, 2010). In general, when trying to investigate the barriers of sustainable fashion consumption, two categories may be identified; internal and external

barriers – also referred to as personal and contextual barriers (Hiller Connell and Kozar, 2012). While internal preventing factors are unique to an individual as they include personal beliefs, knowledge or attitudes, the external barriers arise typically outside of the person's control and can be considered as given facts (Stern and Oskamp, 1987). Consumers' missing knowledge about the topic of sustainable fashion and the negative attitudes towards the characteristics and attributes of sustainable clothes (aesthetics) are regarded as personal barriers (Hiller Connell, 2010). As far as contextual barriers are concerned, Hiller Connell (2010) identifies some of them, such as the limited availability of clothing stores, the limited amount of clothing items that match one's aesthetic desires, the price charged and societies judgment about the apparel (Hiller Connell, 2010). Furthermore, Vermeier and Verbeke (2006) list scepticism and the lack of trust put into the companies claims that are made about sustainable products as restraints for consumers to make a purchase. Luchs et al. (2010) add that consumers expect a trade-off between product sustainability and the functional performance which also acts as a preventing factor.

According to the literature presented, there is a substantial number of factors that prevent consumers to buy more sustainable fashion. Amongst the most relevant factors is consumer knowledge and the quality and quantity of information that is provided to the consumer (De Pelsmacker, 2007). Given fact that consumers do not have clear information at their disposal in order to make more sustainable decisions, the present research intends to go one step further in the literature and investigate the impact of information on consumers' willingness to pay for sustainable fashion. To advance on the proposed topic and in order to answer to the research questions presented before, we will focus on knowledge as a potential barrier for sustainable consumption.

## 2.2 Consumer knowledge

In the context of consumer behavior research 'knowledge' can be defined as “*the information stored within memory*” (Engel et al., 1990, p. 281). In literature, it is linked frequently to information gathering and to the consumers decision-making process (Alba and Hutchinson, 1987). A very frequently used division of consumer knowledge is provided by Alba and Hutchinson (1987): familiarity and expertise. While familiarity is defined as the amount of experiences a consumer had with the product over time (such as product purchase or usage), expertise can be described as the ability to successfully execute product-related tasks. On the

other hand, Brucks (1985) believes that it actually requires three components for consumers' knowledge: prior experience, objective and subjective knowledge. Objective knowledge can be defined as the knowledge that an individual truly possesses while the subjective knowledge is what an individual believes to know, also known as self-rated knowledge (Aertsens et. al, 2011). Brucks (1985) points out that prior experience is a bit of an inconsistent construct, as different individuals may store different experience memories about similar experiences; therefore, also the behaviour of the individuals will be different. It is constituting to the overall consumer knowledge, but needs to be interpreted differently as the other two types of knowledge measures.

At this point it should be noted that for the purpose of this present study, the study design was based on Brucks (1985) consumers' knowledge division by using two separate components: prior experience and subjective knowledge. The prior experience variable will be based on prior sustainable fashion purchases. As an indicator for prior knowledge, self-rated (subjective) knowledge will be used. This proceeding is based on research studies that show that subjective and objective knowledge are moderately significantly correlated (e.g. Brucks, 1985; Flynn and Goldsmith, 1999; Forbes et. al, 2008; Goldsmith and Goldsmith, 1997; Raju et al., 1995); meaning that subjective (self-assessed) knowledge is a legitimate indicator for consumer knowledge as it positively correlates with actual knowledge (Forbes et. al, 2008). Making a separate and third assessment for objective knowledge was therefore foregone.

Depending on the amount and depth of available information about a product, the reason for the purchase, the time of the consumption and the overall experience can be influenced (Ellis, 2015). The mere existence of information about the product, however, will not be sufficient to have an impact on consumer behavior, unless the information can be processed into relevant meaning (Ellis, 2015). Raju et al. (1995) argue that the information a consumer has is highly important in every stage of the decision-making process, starting from the need recognition state, through the problem definition, the search for information, the evaluation of alternatives, the purchase execution, product (or service) consumption, and finally the evaluation of the experience in a post-purchase phase.

A great deal of research on knowledge and familiarity (Bettman and Park, 1980; Johnson and Russo, 1984; Brucks, 1985; Rao and Monroe, 1988) also suggests that consumers who have high levels of knowledge seem to have distinct information processing mechanisms. Consumers high in knowledge, for instance, are capable of searching for the desired products more efficiently than consumers whose knowledge level is lower (Bettman and Park, 1980).

Accordingly, Brucks (1985) suggests that consumers can use knowledge as a facilitator to seek more attribute information and sort out information about appropriate alternatives, as we review next.

### ***2.2.1 Consumer knowledge with respect to the sustainability concept***

In general, the impact of consumer knowledge on green consumption is rather controversial (Kim et al., 2016). While researchers such as Kollmuss and Agyeman (2002) argue that no clear correlation between consumers' knowledge and sustainable consumption can be found, other studies show opposite findings (Rokicka and Slomczynska, 2002; Paulins and Hillery, 2009; McNeill and Moore, 2015). Even though there is a general trend in society about the increasing levels of environmental and social awareness, actual knowledge about the meaning and impact of green fashion is still insufficient (Beard, 2008). Therefore, to aid consumers being more responsible with their fashion choices, Paulins and Hillery (2009) argue that providing knowledge to individuals is vital. That is, sustainable consumption can be promoted if consumers know about the product and its impacts on sustainability (Shim, 1995). Furthermore, Dickson (2001) argues that the more consumers understand about the sustainable dimensions of products, the more likely it is for them to actually purchase them. In the same vein, Kaiser and Fuhrer (2003) argue that a reason why the influence of knowledge on sustainable behavior is frequently underestimated is that most studies only include one or two forms of knowledge. Instead, different forms should be used to educate the consumer and "*work together in a convergent manner*" (p. 598), as we review next.

### ***2.2.2 Forms of consumer knowledge***

Kaiser and Fuhrer (2003) divide knowledge into four categories; declarative environmental knowledge, procedural knowledge, effectiveness knowledge and social knowledge.

Declarative knowledge, also called system knowledge (Kim et al., 2016), is described to be the "answer to the question of how environmental systems work" (Schahn, 1996, cited in Kaiser and Fuhrer, 2003, p. 600). For sustainable fashion this means that, for instance, educating the consumer about the effects of releasing substantial amounts of carbon monoxide into the atmosphere due to the use of synthetic fibers in clothes production. Lantermann et al. (1992) point out that system knowledge helps reducing potential uncertainties consumers may have and therefore enable them to take actions. However, many studies show that system knowledge



alone is not sufficient to lead to sustainable behavior (e.g. Grob 1995; Schahn and Holzer 1990; Diekmann and Preisendörfer, 1992).

Procedural knowledge, also called action-related knowledge, is addressing the problem and explaining how a certain goal can be achieved (Kaiser and Fuhrer, 2003). Therefore, it offers possible behavioral options (Ernst, 1994). Within the context of sustainable fashion consumption, it could provide potential customers with information about where to buy sustainable clothes or which stores shall be avoided due to employing workers under sweatshops-conditions or using environment-harming production procedures. Schahn (1996) calls this information pertaining to which behavior should be prevented as avoidance knowledge.

A frequent question arises by consumers wishing to engage in sustainable consumption is whether it is worth the sacrifice (Kim et al., 2016). Rationally acting individuals should be guided by a cost-benefit ratio, in that costs that are rather easily to identify are evaluated more efficiently than the value of the ecological benefit since it is generally hard to measure (Van Raaij, 1988). By addressing this problem, the third type of knowledge - the effectiveness knowledge - provides information about how effective a certain (sustainable) behavior is (Kim et.al, 2016). Information such as how much water can be saved during the production of a pair of jeans made from recycled cotton is an example of how effectiveness knowledge can be used in the sustainable fashion context.

The fourth form of knowledge, social knowledge, derives from the observation of others' behavior and can help to overcome the lack of declarative environmental knowledge. In this regard, social norms are mentioned which relate to normative beliefs about how to behave in the front of others (Turiel, 1985). Social norms can be divided into two sets of thinking; moral norms and conventional norms (Tugendhat, 1994). The former represents domains such rights of all humans, fairness, justice and welfare, while conventional social norms derive from traditions or social customs and are followed by people in order to receive social approval or avoid social disapproval (Bischof, 1980). Prior literature considering social norms suggest that both forms of social norms may entice sustainable behavior (e.g. Howe et al., 1996; Kaiser and Shimoda, 1999, Hornik et al. 1995). A hint on the label of a fashion item stating how many percent of customers switched from normal to sustainable clothes in a certain period of time could be a way of providing social knowledge.



This present paper will be based on the assumptions made by Kaiser and Fuhrer (2003) and further investigate, if providing the presented knowledge in advertising actually has the predicted outcome.

## 2.3 Marketing communications

The term “Marketing Communications” can be interpreted in many ways; the origins of the definition, however, describe it as “*the use of communication to persuade people to buy products and services*” (Fill and Jamieson, 2006, p. 9). Marketing communications integrate a wide range of tools which are used to raise awareness of the products and services, persuade customers, but also to help them to develop preferences (Fill and Jamieson, 2006). Fill and Jamieson (2006) state that while initially marketing communications focused on one-way communications, this perspective has shifted to a two-way, interactive and dialogic approach in order to reach and satisfy different needs of varying audiences. Figure 2 illustrates the tools of marketing communications, which are sales promotions, direct marketing, public relations, personal selling and advertising (Fill and Jamieson, 2006): Sales promotions are a non-personal form of communication that provide added value to an offering and try to accelerate sales. Direct marketing focuses on personalised communication, using for example direct mail or telephone calls with potential customers to promote one-to-one relationships. Public relations focus on “*creating and maintaining goodwill of an organization's various publics (customers, employees, investors, suppliers, etc.)*”, usually carried out through nonpaid media (Business Dictionary, 2017). Personal selling involves face-to-face communication between an individual representing an organisation and potential customers with the goal to inform and persuade the client and eventually engage in a business relation (Fill and Jamieson, 2006). The last tool of marketing communications is advertising, which is a form of non-personal mass communication with the ability to reach a vast number of people and offers the advantage of giving high degree of control to the advertiser regarding the design and delivery of the marketing message (Fill and Jamieson, 2006). As the focus of this dissertation lies on the use of information in advertising, this form of marketing communication will be explained in more detail, next.

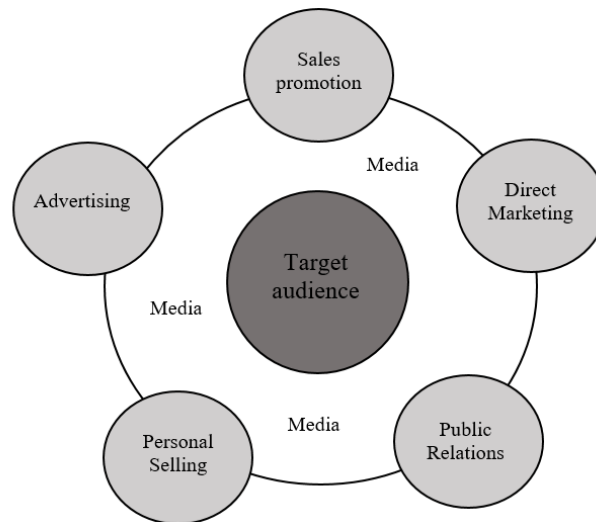


Figure 2: The tools of marketing communications

Source: adapted from Fill and Jamieson (2006)

### 2.3.1 Advertising and the role of information

Puto and Wells (1984) argue that advertising can be divided into transformational and informational advertising. Transformational advertising is focusing on the emotional experiences during the use or consumption of the advertised product or service with the purpose to translate these emotions into an active interest in purchasing. It can be stated that this form of advertising appeals to the affective notions of the people being exposed to it. On the other hand, informational advertising is defined as the source of factual and relevant data provided to the consumer in a clear and logical way with the aim to facilitate the assessment of the merits of the product or service being advertised (Puto and Wells, 1984). This form of advertising is therefore directed towards more cognitive rather than emotional elements. Informational advertising can also be described as a promotion that educates the public about the elements and benefits of the product, its abilities and functionalities, its advantages compared to competing products and information about where to buy the product (Business Dictionary, 2017). Hunt (1976) points out that if an advertising message provides a vast amount of knowledge to a consumer, it can cause effective persuasion of that individual and consequently lead to purchasing the product or service being advertised.

### 2.3.2 Informational advertising for sustainable fashion

According to Rand Corporation (2004) consumers are on average less exposed to advertising of green and environmentally friendly products and therefore have less opportunity to evaluate

these types of products compared to mainstream products (cited in Pickett-Baker and Ozaki, 2008, p. 282). Cowan and Kinley (2014) also suggest that sustainable apparel companies should focus their marketing on educating the customers and providing information in order to raise awareness and consequently increase the consumption of sustainable clothes. They further argue that special attention should be drawn to highlighting the benefits of buying fashion that is produced in a sustainable way. A study by Pickett-Baker and Ozaki (2008) shows that consumers wish to receive clear information about the benefits of sustainable products and how environmentally friendly the products are. They suggest that consumption of sustainable products can be induced by using effective advertising means.

### ***2.3.3 Prior consumer knowledge and its relationship with advertising***

As described in more detail in Chapter 2.2, consumer knowledge is “*the subset of total information relevant to consumers functioning in the marketplace*” (Engel et al., 1993, p. 301). A vast amount of research focuses on the investigation of consumer’s knowledge that is stored in memory and its influences on cognitive processes (Bettman, 1979, Olson, 1978). Studies show that prior knowledge can affect the speed of pattern recognition (Chase and Simon, 1973), recall of information (Arkes and Freedman, 1984), acquisition of information (Chiesi et al., 1983), search for information (Brucks 1985, Johnson and Russo 1984), strategies to process information and organization of memory (Sujan 1985). Prior knowledge includes different types of information such as product features and attributes, awareness of product category and beliefs about the product category in general, product terminology, but also beliefs about specific brands (Engel et al., 1993).

Showers and Cantor (1985) argue that more knowledgeable individuals, also referred to as “experts”, can use their knowledge to more accurately and efficiently process information compared to people without prior knowledge (referred to as “novices”). According to Maheswaran and Sternthal (1990), both experts and novices can be prompted to process information received from an advertisement. However, depending on the level of consumer knowledge the detailed processing of the message content is prompted by different advertising-related factors. On one hand, experts may consider attribute statements in advertising informative, while on the other hand, novices may consider benefit statements to be of importance (Conover, 1982; Johnson and Sathi, 1984). In conflict with the prior mentioned findings, Bettman and Park (1980) found no difference in information processing between

experts and novices. These varying results show the need for further research in the field of prior knowledge of consumers and its relation with informational advertising.

### 3. CONCEPTUAL FRAMEWORK AND HYPOTHESES

Based on the literature review provided about sustainability, its context in the fashion industry, and the influence of both consumer knowledge and marketing communications, this chapter focuses on the conceptual model and the hypotheses that will be tested.

The conceptual model hereby presented is adapted from Kaiser and Fuhrer (2003), which proposes four types of knowledge (declarative, procedural, effectiveness and social knowledge) in order to boost sustainable consumption behaviors. The study will examine the impact of informational advertising (explicit information versus no information) on consumers' willingness to purchase sustainable fashion (see Figure 3).

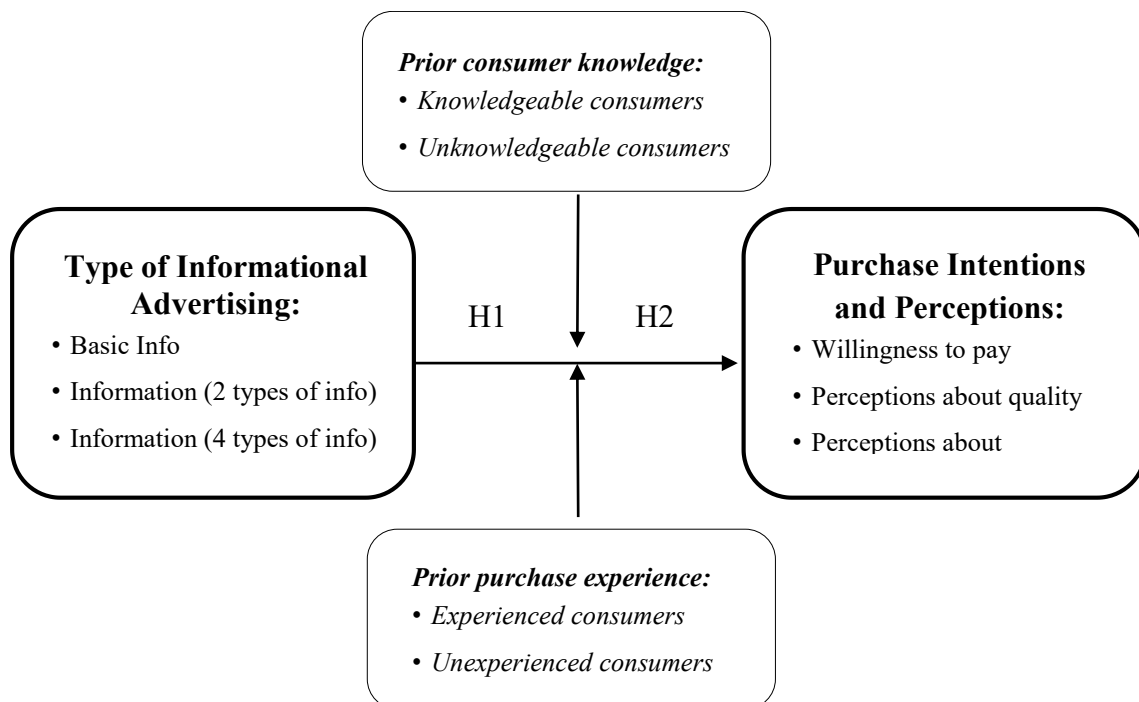


Figure 3: Conceptual Framework

Source: own contribution

As suggested by prior research on consumer knowledge (Shim, 1995), providing information about sustainable products and its implications for the environment to consumers is likely to

boost consumption. In fact, the more understanding consumers have about a product's sustainable dimension the more likely they are to purchase the item (Dickson, 2011). On the opposite, if a company simply claims that its products are sustainable without giving further information, consumers often react sceptically (Harris, 2007). Moreover, according to Kaiser and Fuhrer (2003), there is a gap in the consumer knowledge literature since one or two forms of consumer knowledge on sustainable behaviour are usually examined. Alternatively, the authors suggest four forms of knowledge to test the impact of information on consumers' willingness to purchase sustainable fashion. Based on the aforementioned findings, our first hypothesis is:

H1: Consumers' overall perceptions and willingness to purchase sustainable fashion will be influenced by informational advertising, so that:

H1a: Providing consumers with complete information details (declarative, procedural, effectiveness and social) about sustainability in an advertisement will increase consumers' overall perceptions and willingness to purchase sustainable fashion compared to providing no information.

H1b: Providing consumers with partial information details about sustainability in an advertisement will not increase consumer's overall perceptions and willingness to purchase sustainable fashion compared to providing no information.

Moreover, the difference between consumers with and without prior knowledge and experience when exposed to informational advertising is examined. While the field of prior consumer knowledge and prior product experience and its implications for advertising effectiveness has not yet come under sufficient scrutiny in literature, some studies propose that for unknowledgeable and unexperienced consumers, benefit statements are of importance (Conover, 1982; Johnson and Sathi, 1984). The given information in the advertising for the purpose of this study can be interpreted as such benefit statements. Furthermore, Nah and Benbasat (2004) argue that unknowledgeable consumers are more easily persuaded by knowledge-based information and could interpret the given information as more useful than consumers who already hold a level of prior knowledge.

Still keeping the literature proposed by Kaiser and Fuhrer (2003) in mind, we propose that the type of consumer will moderate the impact of informational advertising on consumers' overall perceptions and willingness to purchase sustainable fashion items. Our second hypothesis is thus presented as follows:

H2: The impact of informational advertising on consumers' overall perceptions and willingness to purchase sustainable fashion items will be moderated by the level of prior consumer knowledge and experience with sustainability.

H2a: For consumers with prior knowledge and purchase experience, increases in the overall perceptions and willingness to purchase sustainable fashion are not expected to occur, even when exposed to full informational advertising (4 and 2 types of information).

H2b: For consumers without prior knowledge and purchase experience, increases in the overall perceptions and willingness to purchase sustainable fashion are expected occur when exposed full informational advertising (4 types of information).

H2c: For consumers without prior knowledge and purchase experience, increases in the overall perceptions and willingness to purchase sustainable fashion are not expected occur when exposed partial informational advertising (2 types of information)

## **4. METHODOLOGY AND DATA COLLECTION**

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With the purpose of presenting the main research method used for this empirical study this chapter will describe in detail what and how variables have been used to provide an answer to the research questions.

### **4.1 Research Method**

In order to receive a vast number of participants for the quantitative research study, the online web platform Qualtrics was used for distributing the survey. This research software was chosen due to its main advantages of providing countless options regarding survey structure as well as question types. Additionally, facilitating tools such as randomizing questions or using pre-defined question blocks from different surveys by simply copying them are available. Furthermore, as the software provides a link to the survey that can simply be copied and shared the distribution is highly facilitated. Also, the option of automatic download of the data into the statistics program SPSS is a major benefit. The data was collected for 23 days and was mainly distributed via social media websites and direct emails. With the aim of reaching a large audience in a short amount of time as well as minimal administration costs, this method for the survey distribution seems to be adequate and effective. In addition, Qualtrics provides the

advantage of convenience and flexibility to participants who have no time pressure or spatial requirements for completing the survey. Nevertheless, it must be taken into account that this tool of answer collection does not offer a high control to the researcher regarding the respondent's environment or level of concentration while filling out the survey. In addition, researchers cannot offer guidance to respondents in case questions arise. To minimize these potential disadvantages, the design of the survey was kept short and simple. The survey consisted only of closed-response questions with an average response time of 3.5 minutes. Additionally, the survey was pretested to check if respondents understood all questions.

## 4.2 Research Design

After exploring secondary data from past research, primary data was collected to answer the research objectives of this study. Considering the high drop-out rate from online surveys as well as the limited time, only complete responses were considered relevant for addressing the research purpose.

The study followed a 2 (Information type: 0; 2; 4 infos) x 2 (prior knowledge consumer type: knowledgeable vs. unknowledgeable) x 2 (prior purchase experienced consumers: experienced vs. unexperienced) randomized between- within Latin squares design.

Two separate moderating factors were explored; prior consumer knowledge and prior consumer experience. First, prior knowledge of participants was assessed by using a combined measure of self-rated environmental and sustainable fashion knowledge. While it is true that using self-assessment as an indicator of knowledge has received critical feedback in literature (Bass and Yammarino, 1991; Campbell and Lee, 1988; Zenger, 1992), other studies argue that it is indeed a reliable measure (Stefani, 1994) and one of the simplest methods to assess knowledge; especially, when comparing the level of knowledge before and after the information input (Lopker and Askeland, 2009). Respondents were thus asked to rate their environmental as well as sustainable fashion knowledge on a 7-point Likert scale, which then were classified as unknowledgeable consumers with self-ratings of four or below and knowledgeable consumers with all self-ratings above.

As previously mentioned in the literature review section, not only knowledge but also prior experience is an influencing factor for the overall consumer knowledge (Brucks, 1985). However, prior experience as a measure of knowledge is less directly linked to behavior compared to subjective or objective knowledge measure (Brucks, 1985). Therefore, the author



of this study considered it to be important to use prior experience as a separate moderating factor. Respondents were asked to indicate whether they have ever purchased sustainable fashion before, whereat prior purchases marked participants as experienced consumers and no prior purchases defined them as unexperienced consumers.

Respondents were then asked about their level of agreement regarding how effective the information that is usually given to consumers about sustainable fashion is and whether they felt well informed by sustainable fashion brands or not. After completion of the first set of questions, respondents were then randomly exposed to one of three experimental manipulations which consisted of three types of manipulated advertisement stimuli. While the control group was exposed to a fashion advertisement of a sustainable fashion brand without including any informational text, both experimental groups were shown the same advertisement with either including two types of information (supporting declarative and effectiveness knowledge) or four types of information (supporting declarative, procedural, effectiveness and social knowledge).

Right after seeing the advertisement, participants were asked to answer to the manipulation check question, where they were asked to rate how informative they perceived the showed stimuli to be on a 7-point Likert scale. Respondents were further asked about how relevant they perceived the information provided by the advertisement to be and whether it helped them to better understand the concept and importance of sustainable fashion. A question concerning the likeliness to purchase sustainable fashion had to be answered and respondents were asked about their perceptions about the aesthetics and quality of sustainable fashion. Finally, participants were asked to fill out some demographic questions and were thanked for their participation.

### 4.3 Stimuli Development

A fictional marketing campaign was created as a stimulus for the study (see Appendix 1). Respondents were randomly exposed to one of three different advertisements of a fictional brand called “Green Fashion Brand”. All advertisement stimuli contained the brand’s name and its logo as well as a picture of well-dressed and fashionably appealing models (both male and female). As a background, a wood pattern design was chosen to create a mental association with nature and environment. As for the advertising scenario without any information inclusion, the only input participants had was that the brand sold fashionable clothes. The design for this version focused on the clothing itself by showing three pictures of well-dressed men and



women. The stimuli version that provided two types of informational knowledge (declarative and effectiveness) presented only a picture with two models (a man and a woman) and two description fields with the relevant information were also included. As to the stimuli with four types of knowledge (declarative, procedural, effectiveness, social), again, all four models were included into the advertisement as well as four description fields, which were evenly distributed across the picture.

It should be noted that, although Kaiser and Fuhrer (2003) suggest that all four types of knowledge are required for consumers to fully engage in sustainable consumption, this study also included a stimuli version with only two types of knowledge in order to verify this assumption. The text itself was chosen by the author and based on actual facts, such as water and energy consumption in the fashion industry, statistics about how many Europeans already buy sustainable fashion, impacts on the environment and availability of the fashion items. The different stimuli were created prior to distributing the main study and critically discussed as well as pretested in the pilot study.

## 4.4 Variable Descriptions

### 4.5.1 *Manipulation check*

The manipulation check measure was assessed by asking participants, after being exposed to the different scenarios, to rate how informative they perceived the showed advertising to be, on a 7-point Likert Scale (1 – not at all, 7 – very much).

### 4.5.2 *Dependent variables*

The crucial dependent variables were assessed after participants were exposed to the experimental manipulations, using a 7-point Likert scale (1 – completely disagree, 7 – completely agree).

*Purchase intention:* After being exposed to the advertising scenario manipulation, participants were asked to rate their level of agreement with a statement that asked about their likelihood of purchasing sustainable fashion.

*Perceptions about aesthetics:* After seeing the advertising scenario manipulation, participants were asked to define their level of agreement with a statement that asked them how fashionable sustainable fashion seemed to them.

*Perceptions about quality:* After looking at the advertising scenario manipulations, participants were asked to rate their level of agreement with a statement that mentioned that sustainable fashion is of higher quality compared to regular clothing.

### 4.5.3 Independent variables

*Type of informational advertising:* This variable was divided into three categories, whereat participants were exposed to one stimuli displaying simply pictures and no information, the second stimuli showed two types of information and the third stimuli included four different types of information in the advertisement.

*Prior consumer knowledge:* This variable was assessed by using a median split and using the self-assessed knowledge construct (general environmental issues and sustainable fashion self-assessed knowledge) which then divided the sample in knowledgeable vs. unknowledgeable participants.

*Prior experience:* This was a dichotomous measure that asked whether participants have ever purchased sustainable fashion before and then divided them accordingly (purchased before: experienced, never purchased before: unexperienced).

All the other remaining variables were also assessed using a 7-point Likert scale and were either asked before being exposed to the advertising as general statements regarding the necessity of information about sustainable fashion or right after the participants were exposed to the stimuli, in order to measure their reaction to the advertisement.

## 4.5 Respondents

Within the 23 days dedicated to data collection, 315 participants started to fill out the online survey. However, only 202 answers were entirely completed and could be considered for the analysis. It is not unusual for online research surveys to record rather high dropout rates as respondents might lack the feeling of commitment to finish the survey or get easily distracted and do not reach the end of the questions (Reips, 2002).

## 5. ANALYSIS AND RESULTS

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### 5.1 Sample Characterization

To provide an accurate portrait of the final sample, some demographic characteristics were analysed. As far as gender is concerned, the sample was mostly female (82.2%). Most of participants were of Austrian nationality (48.5%), followed by 9.9% Portuguese and 8.9% Germans. Regarding the age, 42.6% of participants belonged to the interval between 15 to 24 years, followed by 37.6% who were aged between 25 to 34 years old. Regarding the education level, 32.2% of respondents were holding a Bachelor's degree, 31.2% stated to have a High School degree and 25.7% had a Master's degree. The majority of respondents said to have a personal income of less than 500€ (34.7%) available each month, followed by 18.8% of participants who had more than 2000 € of available income; 18.8 % stated to have between 501€ and 1000€ of available monthly income.

### 5.2 Scale Reliability

For the purpose of this present study the used variables need to be checked for reliability in order to provide results and findings as accurate as possible. For the two variables of self-assessed knowledge about environmental and sustainable fashion knowledge a bivariate correlation test was used as the variables were combined to form the prior consumer knowledge variable. The value for the Pearson Correlation (.47) was significant with a level of  $p < .001$  and can therefore be interpreted as a moderately positive correlating relationship between both variables.

### 5.3 Manipulation check

Two manipulation checks were performed; one for the four-types-of-info-option and one for the two-types-of-info-option.

The manipulation check for four types of information in the advertisement showed statistically significant results, when an independent t-test at a 95% confidence level was conducted. Respondents exposed to the information stimuli perceived the advertisement to be more

informative than the ones seeing a stimuli without any type of information ( $M_{\text{four infos}} = 4.73$  vs.  $M_{\text{no info}} = 2.88$ ;  $t(139) = 8.02$ ,  $p < .001$ ).

Also, statistically significant manipulation check results were found for the two-information-stimuli ( $M_{\text{two infos}} = 5.10$  vs.  $M_{\text{no info}} = 2.88$ ;  $t(137) = 9.20$ ,  $p < .001$ ). Thus, the different information type versus no information in the stimuli were successfully manipulated (see Table 1).

Table 1: Manipulation Check using t-tests for Equality of Means

	Informational advertising type				
	Four infos		No info		t-test
	Mean	SD	Mean	SD	
Manipulation check (How informative is the advertising rated)	4,73	1,11	2,88	1,53	8,02***
	Two infos		No info		t-test
	Mean	SD	Mean	SD	
Manipulation check (How informative is the advertising rated)	5,10	1,23	2,88	1,53	9,20***

Note: \*\*\* $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ , +  $p \leq .1$

## 5.4 Main results

After having validated all variables and successfully computed the manipulation check for the experimental condition, both sets of hypotheses were tested. In order to do that, we run a multivariate analysis of variance (MANOVA) to examine the influence of information used in an advertisement on consumers' overall perceptions and willingness to purchase sustainable fashion. However, two sets of analyses were used in order to compare the effects of the pairs of information used in the advertisement scenarios (zero and two types of information; and zero and four types of information) conducting two separate analyses. First, we run a 2 (Information type: 0 vs. 4 infos) x 2 (prior knowledge consumer type: knowledgeable vs. unknowledgeable) x 2 (prior purchase experienced consumers: experienced vs. unexperienced) MANOVA. Secondly, a 2 (Information type: 0 vs. 2 infos) x 2 (prior knowledge consumer type: experts vs. novices) x 2 (prior purchase experienced consumers: experienced vs. unexperienced) MANOVA was run on the dependent variables. Since the objective of this research is mainly

to understand the differential effects when providing some (or full) information against no explicit information and also, because no significant results were obtained for these pairs of information used in the advertisement scenarios with partial and full information details (two and four types of information), these will not be discussed further.

#### ***5.4.1 No vs. four types of information in advertisement***

*H1: Consumers' overall perceptions and willingness to purchase sustainable fashion will be influenced by informational advertising, so that:*

*H1a: Providing consumers with complete information details (declarative, procedural, effectiveness and social) about sustainability in an advertisement will increase consumers' overall perceptions and willingness to purchase sustainable fashion when compared to providing no information.*

In order to test hypothesis 1a, a MANOVA was performed by testing the main effect of type of info on the dependent variables. This form of statistical test is used for identifying the effect of one or more independent categorical variables on one or more dependent variables and therefore is a suitable instrument to be used in this analysis (Seltman, 2006).

A significant type of information main effect was found on quality perceptions ( $F(1, 139) = 7.84, p < .05$ ) and a marginally significant main effect was obtained on purchasing intentions after participants were exposed to the advertisements ( $F(1, 139) = 3.42, p = .067$ ). However, no significant main effect was detected for aesthetic perceptions. It is important to mention that regarding the significance level for the present study, no sharp distinction was drawn between values below or above the .05 threshold to strictly determine significant or not significant results. As pointed out by Gelman and Stern (2006), persisting on the significance-division determined by the .05 threshold could lead to ignoring important insights. Referring to the statement of the researchers Rosnow and Rosenthal (1989, p. 1277) about the use of p values, “*Surely, God loves the .06 nearly as much as the .05*”, for the purpose of this study, p-values between .05 and .1 will be interpreted as marginally significant.

Respondents exposed to the four-info-condition showed higher values for purchase intentions for sustainable fashion than those exposed to no information in the advertising, with marginal significance ( $M_{\text{four infos}} = 4.29$  vs.  $M_{\text{no infos}} = 3.79, t(139) = 1.85, p < .1$ ). Considering the quality

ratings, participants seeing the stimuli with all information showed better ratings than the ones not receiving any information ( $M_{\text{four infos}} = 5.05$  vs.  $M_{\text{no infos}} = 4.46$ ,  $t(139) = 2.80$ ,  $p < .05$ ).

Summarizing these results (see Table 2), it can be stated that hypothesis 1a is partially supported.

*Table 2: Results Main Effect with 4 Types of Knowledge*

	Informational advertising type				
	Four infos		No info		
Dependent variables	Mean	SD	Mean	SD	F-test
Purchase Intention	4.29	1.37	3.79	1.71	3.41+
Perception about Aesthetics	4.43	1.34	4.24	1.59	.54
Perception about Quality	5.05	1.04	4.46	1.37	7.840*

Note: \*\*\* $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ , + $p \leq .1$

#### 5.4.2 Zero vs. two types of information in advertisement

*H1b: Providing consumers with partial information details about sustainability in an advertisement will not increase consumer's overall perceptions and willingness to purchase sustainable fashion compared to providing no information.*

In order to test hypothesis 1b, again, a MANOVA was performed. Contrary to our assumptions, a significant main effect was found on purchase intentions ( $F(1/137) = 11.44$ ,  $p = .001$ ) as well as on quality-perceptions ( $F(1/137) = 11.24$ ,  $p = .001$ ). Again, no significant main effect was detected for aesthetic perceptions (see Table 3). Respondents exposed to the two-info-condition showed higher values for purchase intentions for sustainable fashion than those exposed to no information in the advertising ( $M_{\text{two infos}} = 4.70$  vs.  $M_{\text{no infos}} = 3.79$ ,  $t(137) = 3.38$ ,  $p = .001$ ). Also considering the quality perception ratings, participants seeing the stimuli with two types of information showed better ratings than the ones not receiving any information ( $M_{\text{two infos}} = 5.21$  vs.  $M_{\text{no infos}} = 4.46$ ,  $t(137) = 3.35$ ,  $p = .001$ ).

*Table 3: Results Main Effect with 2 Types of Knowledge*

	Informational advertising type				
	Two infos		No info		
Dependent variables	Mean	SD	Mean	SD	F-test
Purchase Intention	4.70	1.38	3,79	1.71	11.44***
Perception about Aesthetics	4.56	1.26	4.24	1.59	1.60
Perception about Quality	5.21	1.23	4.46	1.37	11.24***

Note: \*\*\* $p \leq .001$ , \*\*  $p < .01$ , \*  $p < .05$ , +  $p \leq .1$

Though hypothesis 1b is not validated, it provides interesting insights since it shows that, contrary to prior consumer knowledge literature (Kaiser and Fuhrer 2003), there is a significant increase in participants' purchase intentions even if only two types of information are included in advertising. This finding could be due to personal preferences of consumers to receive less information or avoid an information overload, where certain pieces of information cannot be fully understood anymore due to the high amount of input (Schneider et.al, 1984). Furthermore, Neuman (2010) suggests that the scarcity of time is another contributing factor to consumer's preferences of less information as individuals might lack the time to fully absorb a vast amount of information presented in an advertisement.

#### ***5.4.3 The moderating effect of consumer type***

*H2: The impact of informational advertising on consumers' overall perceptions and willingness to purchase sustainable fashion items will be moderated by the level of prior consumer knowledge and experience with sustainability.*

*H2a: For consumers with prior knowledge and purchase experience, increases in the overall perceptions and willingness to purchase sustainable fashion are not expected to occur, even when exposed to full informational advertising (4 and 2 types of information).*

*H2b: For consumers without prior knowledge and purchase experience, increases in the overall perceptions and willingness to purchase sustainable fashion are expected occur when exposed full informational advertising (4 types of information).*

*H2c: For consumers without prior knowledge and purchase experience, increases in the overall perceptions and willingness to purchase sustainable fashion are not expected occur when exposed partial informational advertising (2 types of information)*

As previously mentioned and in order to test the second hypothesis, a group comparison analysis was performed, which analysed both the groups of participants exposed to four-types vs. zero-type of information and the groups of participants exposed to two-types vs. zero-type of information, separately.

To test hypotheses 2a and 2b, results from the 2 (Information type: 0 vs. 4) x 2 (prior consumer knowledge: knowledgeable vs. unknowledgeable) x 2 (prior experience: experienced vs. unexperienced) multivariate analysis of variance (MANOVA) showed a significant interaction effect on purchase intentions ( $F(1/132) = 4.54, p < .05$ ). Yet, no significant interaction effects were observed for quality perceptions ( $F(1/132) = 2.40, p > .1$ ) nor aesthetic perceptions ( $F(1/132) = .06, p > .1$ ; see table 4).

Table 4: MANOVA interaction– 4 infos

Informational advertising type							
Zero infos vs. 4 Infos							
	Prior Experience Main effect	Prior Consumer knowledge Main effect	Informational advertising Main effect	Prior Experience * Prior Consumer Knowledge	Prior experience * Informational advertising	Prior Consumer Knowledge * Informational advertising	Prior experience* Prior Consumer Knowledge* Informational Advertising
	F-test	F-test	F-test	F-test	F-test	F-test	F-test
Purchase Intentions	4.28*	.56	1.25	.00	.11	.42	4.54*
Aesthetic Perceptions	.00	.03	.02	.30	.19	1.33	2.40
Quality Perceptions	4.42*	.84	8.20**	.13	1.82	.01	.06

Note: \*\*\* $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ , +  $p \leq .1$

Regarding H2a, follow-up tests were then performed considering both the knowledgeable and unknowledgeable participants separately. For the knowledgeable participants' condition, results of the 2 (information type) x 2 (prior experience) MANOVA indicate that no significant



interaction effects are observed for this sample, fully supporting H2a ( $F_s \leq 1.17$ ,  $p's > .1$ ; see Table 5).

*Table 5: Knowledgeable consumers – 4 infos*

*Two-way interaction of informational advertising and prior experience*

	<b>Zero infos vs. 4 Infos</b>		
	<i>Informational advertising main effect</i>	<i>Prior Experience main effect</i>	<i>Prior experience * Informational advertising</i>
	<b>F-test</b>	<b>F-test</b>	<b>F-test</b>
Purchase Intentions	.07	1.47	1.06
Aesthetic Perceptions	.51	.08	1.17
Quality Perceptions	2.50	1.74	.35

Note: \*\*\* $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ , +  $p < .1$

To test, H2b, when considering the unknowledgeable participants' sample, findings from the information type x prior experience MANOVA indicate a significant two-way interaction once more on purchase intentions only ( $F(1, 75) = 5.23$ ,  $p < .05$ ); see Table 6).

*Table 6: Unknowledgeable consumers – 4 infos*

*Two-way interaction of informational advertising and prior experience*

	<b>Zero infos vs. 4 Infos</b>		
	<i>Informational advertising main effect</i>	<i>Prior Experience main effect</i>	<i>Prior experience * Informational advertising</i>
	<b>F-test</b>	<b>F-test</b>	<b>F-test</b>
Purchase Intentions	2.70	3.53 <sup>+</sup>	5.23*
Aesthetic Perceptions	.95	.31	1.16
Quality Perceptions	7.81**	3.09 <sup>+</sup>	2.57

Note: \*\*\* $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ , +  $p < .1$

Results indicate that unknowledgeable participants without prior purchase experience report higher purchase intentions when exposed to full informational advertising than when no explicit information is provided on advertisements ( $M_{\text{Unknowledgeable, UnExp, four infos}} = 4.45$  vs.  $M_{\text{Unknowledgeable, UnExp, no infos}} = 3.13$ ,  $t(41) = 2.72$ ,  $p = .01$ ), partially supporting H2b (see Table 7 for detailed results).

Table 7: Unknowledgeable, Unexperienced Consumers– 4 infos

Informational advertising type					
Dependent variable	Four infos (N = 20)		No info (N = 23)		t-test
	Mean	SD	Mean	SD	
Purchase Intention	4.45	1.36	3.13	1.77	2.72**

Note: \*\*\*p &lt; .001, \*\* p ≤ .01, \* p &lt; .05, +p ≤ .1

To test hypothesis 2c, we analysed the sample of participants exposed to two-types vs. zero-type of information. Results from the 2 (Information type: 0 vs. 2) x 2 (prior consumer knowledge: knowledgeable vs. unknowledgeable) x 2 (prior experience: experienced vs. unexperienced) multivariate analysis of variance (MANOVA) showed a significant interaction effect on aesthetic perceptions ( $F(1/131) = 5.40, p < .05$ ), and a marginally significant interaction effect on purchase intentions ( $F(1/131) = 2.78, p = .09$ ). No significant interaction effect was observed for quality perceptions' dependent variable ( $F = 2.24, p > .1$ ; see Table 8).

Table 8: MANOVA interaction – 2 infos

Informational advertising type							
Zero infos vs. 2 Infos							
	Prior Experience Main effect	Prior Consumer knowledge main effect	Informational advertising main effect	Prior Experience * Prior Consumer Knowledge	Prior experience * Informational advertising	Prior Consumer Knowledge * Informational advertising	Prior experience* Prior Consumer Knowledge* Informational Advertising
	F-test	F-test	F-test	F-test	F-test	F-test	F-test
Purchase Intentions	4.26*	.13	2.16	0.1	.01	.10	2.78 <sup>+</sup>
Aesthetic Perceptions	.01	.02	.12	.35	.18	.95	5.40*
Quality Perceptions	4.76*	0.1	3.07 <sup>+</sup>	2.39	.16	.44	2.24

Note: \*\*\*p &lt; .001, \*\* p ≤ .01, \* p &lt; .05, +p ≤ .1

Again, follow-up tests were performed splitting the file according to both knowledgeable and unknowledgeable participants. For the knowledgeable participants' condition, results of the 2 (information type) x 2 (prior experience) MANOVA indicate that no significant interaction effects were again observed for this sample; fully supporting H2a (see Table 9).

*Table 9 Knowledgeable consumers –2 infos*

*Two-way interaction of informational advertising and prior experience*

	<b>Zero infos vs. 2 Infos</b>		
	<i>Informational advertising main effect</i>	<i>Prior Experience main effect</i>	<i>Prior experience * Informational advertising</i>
	F-test	F-test	F-test
Purchase Intentions	.40	1.34	.95
Aesthetic Perceptions	.51	.13	2.19

Note: \*\*\* $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ , + $p < .1$

Contrary to our expectations, for the unknowledgeable participants' sample, findings from the information type x prior experience MANOVA indicate a significant two-way interaction on aesthetic perceptions ( $F(1, 73) = 4.63, p < .05$ ) and a marginally significant interaction effect on purchase intentions ( $F(1, 73) = 3.00, p = .08$ ; see Table 10).

*Table 10: Unknowledgeable consumers –2 infos*

*Two-way interaction of informational advertising and prior experience*

	<b>Zero infos vs. 2 Infos</b>		
	<i>Informational advertising main effect</i>	<i>Prior Experience main effect</i>	<i>Prior experience * Informational advertising</i>
	F-test	F-test	F-test
Purchase Intentions	4.01*	5.05*	3.00 <sup>+</sup>
Aesthetic Perceptions	.50	.33	4.63*

Note: \*\*\* $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ , + $p < .1$

Results indicate that unknowledgeable and unexperienced participants report higher aesthetic perceptions ( $M_{\text{Unknowledgeable, UnExp, two infos}} = 4.89$  vs.  $M_{\text{Unknowledgeable, UnExp, no infos}} = 3.96, t(39) = 2.03, p < .05$ ) and higher purchase intentions towards sustainable fashion ( $M_{\text{Unknowledgeable, UnExp, two infos}} = 4.44$  vs.  $M_{\text{Unknowledgeable, UnExp, no infos}} = 3.13, t(39) = 2.47, p < .05$ ) when exposed to

partial informational advertising than when no explicit information is provided (see Table 11 for detailed results). Though H2c is not validated, results suggest once more that unknowledgeable and unexperienced consumers considered the information in the advertisement important even if only partial information is provided. These findings could be due to the fact that consumers with a lack of knowledge and experience are more easily persuaded, even with only some knowledge-based information, and could interpret the given information as more useful than consumers with prior knowledge and experience (Nah and Benbasat, 2004).

*Table 11: Unknowledgeable, Unexperienced Consumers– 2 infos*

	Informational advertising type				
	Two infos (N = 18)		No info (N = 23)		
Dependent variables	Mean	SD	Mean	SD	t-test
Purchase Intention	4.44	1.58	3.13	1.77	2,47*
Perception about Aesthetics	4,89	1.13	3.96	1.67	2.03*
Perception about Quality	5,22	1.22	3.83	1.23	3.63***

Note: \*\*\*p ≤ .001, \*\* p < .01, \* p < .05, +p ≤ .1

#### 5.4.4 Further analysis

Before even being exposed to any sort of advertising, survey participants were asked general questions about how they perceive the current situation of information availability about sustainable fashion. Using frequencies, results clearly revealed that consumers long for more input from sustainable fashion brands. Almost 30% of respondents indicated that sustainable fashion brands do not explain adequately what their products stand for and what impact they have on the environment. Around 80% of participants stated to (at least slightly) agree with the statement that sustainable fashion brands should explain better what their products stand for and what impacts they have on the environment (see Figure 4). Around 78% of all respondents indicated that they would like to receive more information regarding sustainable clothes (see Figure 5).

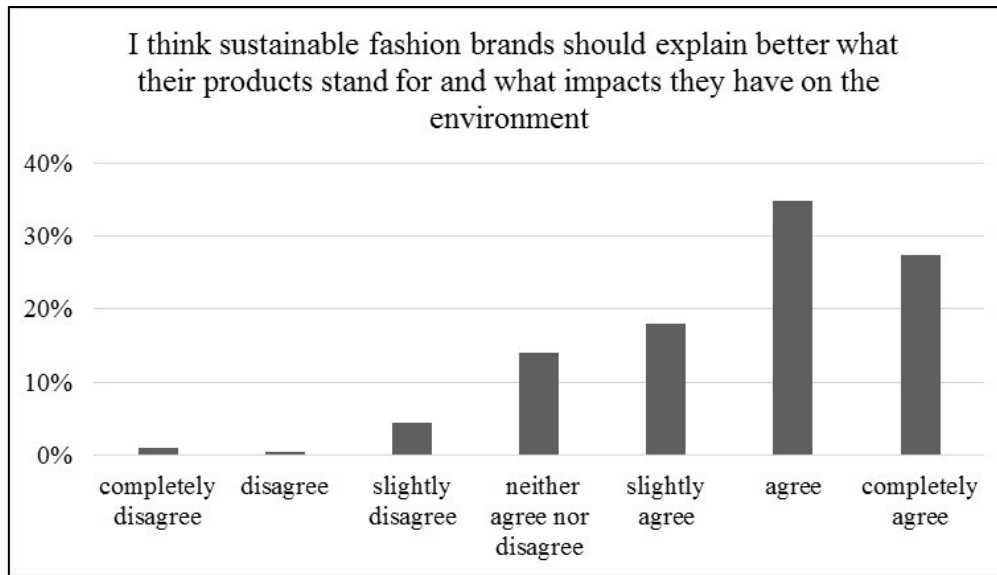


Figure 4: Necessity for information (1)

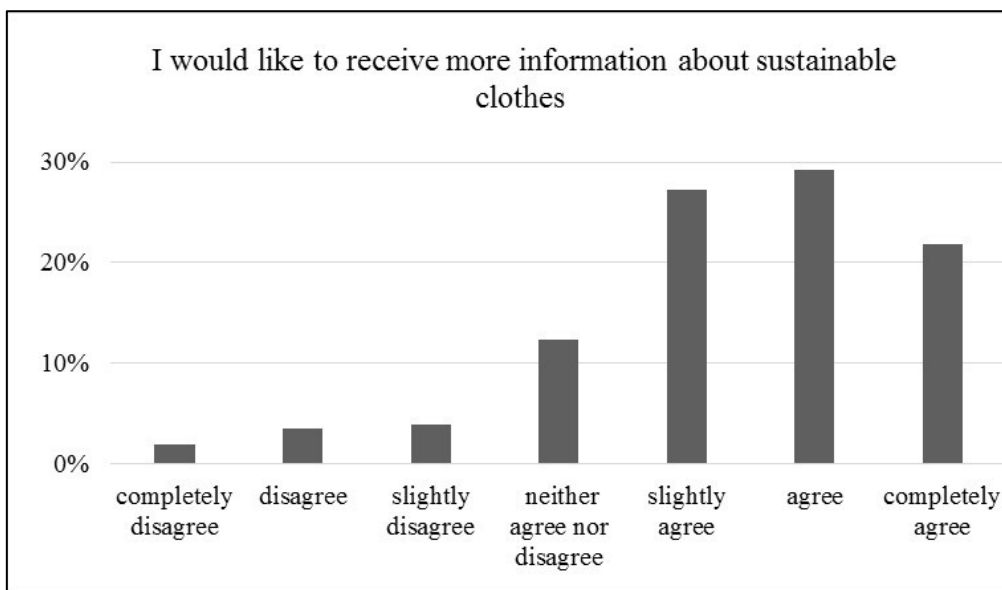


Figure 5: Necessity for information (2)

After being exposed to the stimuli, information content questions were asked. Participants who saw four types of information indicated to perceive the information very relevant and important for them as potential consumers ( $M_{\text{four infos}} = 4.87$  vs.  $M_{\text{no info}} = 2.97$ ,  $t(139) = 8.48$ ,  $p < .001$ ), stated to feel more informed about the topic of sustainable fashion ( $M_{\text{four infos}} = 4.54$  vs.  $M_{\text{no info}} = 2.47$ ,  $t(139) = 8.31$ ,  $p < .001$ ), and considered the provided knowledge as a help to better understand the necessity of buying fashion that is sustainable ( $M_{\text{four infos}} = 4.70$  vs.  $M_{\text{no info}} = 2.62$ ,  $t(139) = 8.52$ ,  $p < .001$ ). The same questions to compare results from the two-info-stimuli

vs. no-info-stimuli were analysed and again, participants exposed to informational advertising showed better ratings than the ones not receiving any info. Table 12 summarizes the results.

Table 12: Information content rating

	Informational advertising type				
	Four infos		No info		
Dependent variable	Mean	SD	Mean	SD	
Information given in advertising considered as relevant and important	4.87	1.07	2.97	1.50	8.48***
Participants feel more informed about sustainable fashion after seeing advertisement	4.54	1.45	2.47	1.48	8.31***
With the provided knowledge participants better understand necessity of sustainable fashion	4.70	1.34	2.62	1.52	8.52***
	Two infos		No info		
Dependent variable	Mean	SD	Mean	SD	t-test
Information given in advertising considered as relevant and important	5.10	1.39	2.97	1.50	8.58***
Participants feel more informed about sustainable fashion after seeing advertisement	4.56	1.52	2.47	1.48	8.12***
With the provided knowledge participants better understand necessity of sustainable fashion	4.82	1.52	2.62	1.52	8.47***

Note: \*\*\* $p < .001$ , \*\*  $p < .01$ , \*  $p < .05$ , +  $p < .1$

Another potential factor that could be interesting to investigate when analysing purchase intentions after being exposed to informational advertising is the personal available income of participants. For the purpose of this analysis, respondents were divided into two groups; participants with a personal income per month lower than 500 € (low income, LI) and participants that have a personal available income higher than 500 € per month (high income, HI). Both information scenarios (two and four) were analysed. An independent t-test for the four-information-stimuli showed significant results: after seeing the advertisement, people with higher personal income showed higher purchase intention ratings than participants with a personal available income of 500 € and below ( $M_{HI} = 4.55$  vs.  $M_{LI} = 3.83$ ,  $t(61) = -2.07$ ,  $p < .05$ ). No significant results were found for the two-info-stimuli nor for the zero-info-stimuli ( $p > .1$ ). A further analysis was undertaken, not taking the scenarios into consideration but simply the personal available income per month with the same consumer division of the 500 € threshold. Again, significant results were found, showing that people with higher incomes have

higher purchase intentions than respondents with lower income ( $M_{HI} = 4,39$  vs.  $M_{LI} = 3.91$ ,  $t(200) = -2.07, p < .05$ ).

## **6. CONCLUSION AND FUTURE RESEARCH, IMPLICATIONS AND LIMITATIONS**

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### **6.1 Conclusion and future research**

With the purpose to find out if and how informational advertising can influence consumers' willingness to purchase sustainable fashion as well as their aesthetics and quality perceptions about it, this thesis brought interesting findings to light. The main insight, which also answers the first research question, is that informational advertising definitely has an effect on consumers' purchase intentions. The results of the study showed that including information boosts willingness to purchase and also positively influences consumers' perception about quality of sustainable fashion. Furthermore, results revealed that including even partial information in an advertisement already leads to better results regarding purchase intention and quality ratings. It can therefore be concluded that having partial information is always better than having no information. Gam (2011) points out that a lack of knowledge in the field of sustainability can lead to consumers refraining from buying sustainable goods. For this reason, and with an urgent necessity for sustainable behaviour nowadays more than ever, it is essential to help consumers making better purchasing choices by providing clear information (McNeill and Moore, 2015). Marketers need to understand how and what information can facilitate this process of consumers to translate their awareness about environmental issues into actual buying behaviour. This study proves that, indeed against expectations, not all four types of knowledge provided in advertisement are necessary to increase sustainable consumption intentions, but even only providing two types of knowledge already has a positive impact.

Furthermore, this research served as a first step to better understand the concept of prior consumer's knowledge and prior purchase experience (Conover, 1982; Johnson and Sathi, 1984; Brucks, 1985; Nah and Benbasat, 2004) and its implications for marketing communications in the context of sustainable fashion consumption. As results show, consumers without experience with sustainable fashion or little to no knowledge regarding this topic clearly showed the need for information. Participants with prior experience and knowledge were revealed to not depend on informational input as much. These findings can be very useful

for marketers of sustainable fashion brands as it informs them about an effective marketing option on how to reach new customers in addition to their regular ones.

While the price charged for sustainable clothes was not a main factor to be examined in this present study, results regarding the relation between personal available income and purchase intentions indicated overall significant correlations. This shows that income as an external barrier does matter in the context of sustainable fashion purchase behavior. Future research could be dedicated to the influence of information regarding price sensitivity of consumers.

## 6.2 Implications

*“The more informative your advertising, the more persuasive it will be.”*

*David Ogilvy, advertising tycoon*

In a nutshell, the key takeaways of this thesis are that

1. Consumers want to be informed
2. Marketers are in charge of providing the required information to consumers.

Nowadays, where the topic of sustainability is increasingly important in almost all areas of life (in business as well as private context), the fashion industry will be well advised to acknowledge this trend and adapt their operations accordingly. Marketers will have to adjust their communication strategies in order to help consumers overcoming potential scepticism and lack of knowledge regarding the topic of sustainable fashion. Especially with sustainable fashion brands only slowly starting to arise more and more, consumers do not have sufficient knowledge of this topic yet and need to be educated about the impacts and implications of buying sustainable clothes. Whether including declarative, procedural, effectiveness and social knowledge into the marketing communication or choosing only part of them, consumers will most certainly regard the information as helpful und adapt their purchasing behavior accordingly.

As this study revealed, information also has a significant impact on consumers' overall quality perceptions. As research suggests, quality as a product-related attribute is critical in affecting consumer's decision when buying sustainable products (Butler and Francis, 1997; Solomon and Rabolt, 2004; Bhaduri and Ha-Brookshire, 2011). Marketers need to take this fact into consideration when selecting the advertising text; for example, while in the context of declarative information, consumers can be educated about the positive impact on the



environment when using organic cotton instead of synthetic fibers and, at the same time, they could be informed about the consequently higher quality of the products. The fact that organic cotton not only is biodegradable but also better for the skin as no pesticides, insecticides, herbicides or insecticides are used during cultivation that could cause nasty skin irritation or rashes (Dietz, 2013), is definitely worth mentioning to consumers as an indicator for higher quality.

Regarding aesthetic perceptions, the overall results for both informational advertising options (0 vs. 4 and 0 vs. 2) did not show to have a significant impact. As one could imagine, seeing the clothes and making a judgement about design and style is based on personal preferences; therefore, information alone cannot influence this part of the perceptual process.

### 6.3 Limitations

Even though this thesis is providing interesting academic and managerial insights regarding the concept of informational advertising in the context of sustainable fashion, some limitations need to be considered.

Firstly, the survey was distributed mainly via social media platforms such as Facebook or Reddit, which is making it difficult for a researcher to define under what conditions participants were answering the survey (level of concentration, dedication to answering correctly and honestly, time factor, etc.). Therefore, it can be stated that the level of control over the overall circumstances of participants while filling out the survey is rather low.

In addition, due to a high amount of surveys distributed on social media websites and the low interest of participants to dedicate their time into answering surveys, the number of participants was rather small. A bigger sample size could potentially improve the significance of the survey.

A further limitation that needs to be mentioned is the high level of female participants in the survey (82.2%), which could represent a one-sided view regarding gender on the topic of sustainability in the fashion industry. However, it is not unknown that the female sex generally shows higher interest in the topic of fashion compared to its male counterpart and therefore, this uneven distribution of gender division does not come as a surprise.

Another circumstance that could be considered as a limitation is the fact that the topic of sustainable fashion is connected to ethics and morals, which might cause respondents to carefully control what they answer in the survey. This behavior is also called ‘social desirability

bias' (Longhurst, 2006): participants may start to self-censor their responses in order to align with perceived socially expected norms (Powell and Single, 1996), which in particular happens in situations where topics connected to ethics are discussed. According to Diamantopoulos et al. (2003), sustainability and environmental awareness have evolved to be topics of high importance over the last decades; such that ignoring these issues is no longer socially acceptable. Therefore, even though respondents were asked to answer honestly and spontaneously in the introduction and an indication of anonymous treatment of data was given, still the answers could be influenced by social desirability bias.

We also need to acknowledge the fact that the advertising stimuli was designed by the author of this thesis and not by a professional marketer. The outcome of this study could be influenced by the chosen design as well as the used sentences as information input. Furthermore, for the two-information-stimuli simply the combination of using declarative and effectiveness knowledge was analysed; the author restrained from other two-knowledge-types combinations as this would have exceeded the specified length of the thesis.

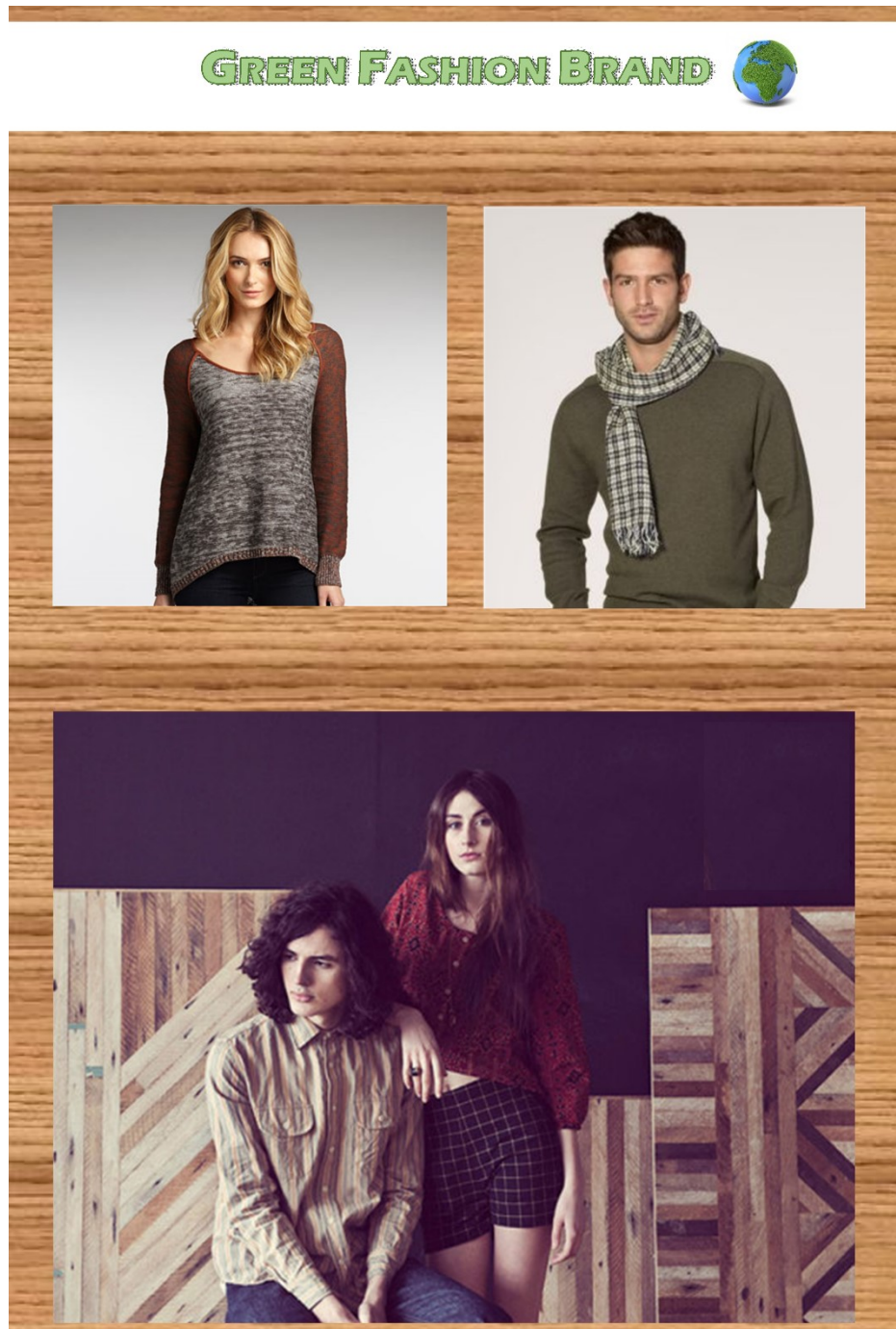
The author decided to use the self-assessed knowledge of participants as part of the classification of consumers into knowledgeable and unknowledgeable. While this could be seen as a further limitation, the choice for this proceeding was done carefully but consciously, as sufficient academic literature supports this type of knowledge classification as mentioned in the literature review.

Lastly, the author would like to emphasize again that prior consumer knowledge and prior experience are separate moderating effects. In order to answer H2, consumers who have prior knowledge and prior experience were analysed in comparison to consumers who are unknowledgeable and unexperienced. No other combinations (e.g. unknowledgeable and experienced consumers) were analysed as the author purposefully wants to show meaningful results for either profound *overall* existing or non-existing pre-knowledge.

## 7. APPENDICES

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### Appendix 1: Stimuli



Appendix 1a: Zero-info-stimuli

## GREEN FASHION BRAND

### Did you know?

It can take more than 20,000 litres of water to produce 1kg of cotton - equivalent to a single T-shirt and pair of jeans!



Our fashion is produced with

**100%**

Fairtrade certified organic cotton, no toxic chemicals are used in the growing process. It doesn't damage the soil, has less impact on the air, uses 71% less water and 62% less energy.

Appendix 1b: Two-info-stimuli



## GREEN FASHION BRAND

### Did you know?

It can take more than 20,000 litres of water to produce 1kg of cotton - equivalent to a single T-shirt and pair of jeans!



Our fashion is produced with

**100%**

Fairtrade certified organic cotton, no toxic chemicals are used in the growing process. It doesn't damage the soil, has less impact on the air, uses 71% less water and 62% less energy.

**50%**

of Europeans already say they actively buy sustainable clothes because they want to help treating the environment like it deserves to: supporting farmers and workers receiving fair wages, reducing water consumption and fighting against genetically modified cotton seeds.



Be conscious about your fashion choices! Follow the green trend now and have a look at our new collection, available in stores and online [www.greenfashionbrand.com](http://www.greenfashionbrand.com)

Appendix 1b: Two-info-stimuli

## Appendix 2: Survey Questions

Introduction:

Dear participants,

Welcome and thank you for taking the time to complete this questionnaire.

This survey is part of a master thesis in its final stage and is dealing with the topic of fashion.

Your participation is very important and contributes to its completion. This survey takes approximately 5 minutes to complete. The obtained data will be treated anonymously and confidentially. Therefore, I ask you to answer honestly and spontaneously. There are no right or wrong answers. If you have questions or feedback regarding the survey, please contact: 152115101@alunos.lisboa.ucp.pt

Your contribution is highly appreciated!

Thank you,

Christina

Q 1: Have you ever purchased sustainable (or eco-) clothes before?

☐ Yes

☐ No

Q 2: Have you ever purchased a fashion item of the following brands/ brand collection?

H&M Conscious

Mango Committed Collection

Everlane

People Tree

Patagonia

Toms

Einleen Fisher

ASOS Eco EditIndigenous

Fat Face

Made

EDUN

☐ Yes

☐ No

Q 3: Please rate your level of knowledge with the following issues

Q 3a: How would you rate your knowledge on environmental issues in general?

1 – not at all informed

2

3

4 – somewhat informed

5

6

7 – very well informed

Q 3b: How would you rate your knowledge on sustainable clothes?

1 – not at all informed

2

3

4 – somewhat informed

5

6

7 – very well informed

Q 4: Please rate your level of agreement with the following statements

Q 4a: In general, sustainable fashion brands explain adequately what their products stand for and what impact they have on the environment

1 – completely disagree

2 – disagree

3 – slightly disagree

4 – neither agree nor disagree

5 – slightly agree

6 – agree

7 – completely agree

Q 4b: I would like to receive more information about sustainable clothes

1 – completely disagree

2 – disagree

3 – slightly disagree

4 – neither agree nor disagree

5 – slightly agree

6 – agree

7 – completely agree

Q 4c: I think sustainable fashion brands should explain better what their products stand for and what impacts they have on the environment

1 – completely disagree

2 – disagree

3 – slightly disagree

4 – neither agree nor disagree

5 – slightly agree

6 – agree

7 – completely agree

Q 5: Please rate your level of agreement with the following statements

Q 5a: It is very likely that I purchase sustainable clothes.

1 – completely disagree

2 – disagree

3 – slightly disagree

4 – neither agree nor disagree

5 – slightly agree

6 – agree

7 – completely agree



Q 5b: I think sustainable clothes look fashionable.

- 1 – completely disagree
- 2 – disagree
- 3 – slightly disagree
- 4 – neither agree nor disagree
- 5 – slightly agree
- 6 – agree
- 7 – completely agree

Q 5c: I think sustainable clothes have a higher quality than regular clothes.

- 1 – completely disagree
- 2 – disagree
- 3 – slightly disagree
- 4 – neither agree nor disagree
- 5 – slightly agree
- 6 – agree
- 7 – completely agree

This is an advertisement of the company “Green Fashion Brand” that sells sustainable clothes. Please take some time to look at it.

*Randomized Stimuli*



The advertisement features a wooden background. At the top, the brand name "GREEN FASHION BRAND" is written in green, blocky letters, followed by a small globe icon. Below this, a light green box contains the text "Did you know?" in bold, followed by "It can take more than 20,000 litres of water to produce 1kg of cotton - equivalent to a single T-shirt and pair of jeans!". To the left of the bottom text box is a photo of a man and a woman in casual clothing. To the right, a light green box contains the text "Our fashion is produced with 100% Fairtrade certified organic cotton, no toxic chemicals are used in the growing process. It doesn't damage the soil, has less impact on the air, uses 71% less water and 62% less energy."

**GREEN FASHION BRAND** 

**Did you know?**  
It can take more than 20,000 litres of water to produce 1kg of cotton - equivalent to a single T-shirt and pair of jeans!

Our fashion is produced with  
**100%**  
Fairtrade certified organic cotton,  
no toxic chemicals are used in the  
growing process. It doesn't  
damage the soil, has less impact on  
the air, uses 71% less water and  
62% less energy.

Q 6: On a scale from 1 (not at all) to 7 (very much), how informative do you perceive this advertisement to be?

- 1 – not at all
- 2
- 3
- 4 – neutral
- 5
- 6
- 7 – very much

Q 7: Based on the advertisement you have just seen, please rate your level of agreement with the following statements

Q 7a: I consider the information given in the advertisement as very relevant and important for me as a potential consumer.

- 1 – completely disagree
- 2 – disagree
- 3 – slightly disagree
- 4 – neither agree nor disagree
- 5 – slightly agree
- 6 – agree
- 7 – completely agree

Q 7b: I feel more informed about the topic of sustainable fashion after seeing this advertisement.

- 1 – completely disagree
- 2 – disagree
- 3 – slightly disagree
- 4 – neither agree nor disagree
- 5 – slightly agree
- 6 – agree
- 7 – completely agree

Q 7c: The provided knowledge helps me to better understand the necessity of buying fashion that is sustainable.

- 1 – completely disagree
- 2 – disagree
- 3 – slightly disagree
- 4 – neither agree nor disagree
- 5 – slightly agree
- 6 – agree
- 7 – completely agree

Q 8: Based on the advertisement you have just seen, please rate your level of agreement with the following statements

Q 8a: It is very likely that I purchase sustainable clothes.

- 1 – completely disagree
- 2 – disagree
- 3 – slightly disagree
- 4 – neither agree nor disagree
- 5 – slightly agree
- 6 – agree
- 7 – completely agree

Q 8b: I think sustainable clothes look fashionable.

- 1 – completely disagree
- 2 – disagree
- 3 – slightly disagree
- 4 – neither agree nor disagree
- 5 – slightly agree
- 6 – agree
- 7 – completely agree

Q 8c: I think sustainable clothes have a higher quality than regular clothes.

- 1 – completely disagree

- 2 – disagree
- 3 – slightly disagree
- 4 – neither agree nor disagree
- 5 – slightly agree
- 6 – agree
- 7 – completely agree

Q 9: What is your gender?

- ☐ Male
- ☐ Female

Q 10: What is your age?

- ☐ Under 15 years
- ☐ 15 – 24 years
- ☐ 25 – 34 years
- ☐ 35 – 44 years
- ☐ 45 – 54 years
- ☐ 55 – 64 years
- ☐ 65 and over

Q 11: Where are you from?

Country List

Q 12: What is the highest level of education you have completed?

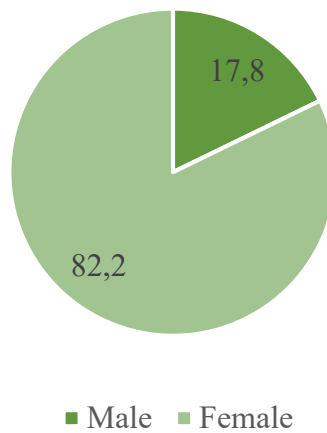
- ☐ Less than High School
- ☐ High School
- ☐ Bachelor's degree
- ☐ Master's degree
- ☐ Doctoral Degree
- ☐ Professional Degree

Q 13: What is your personal available monthly income?

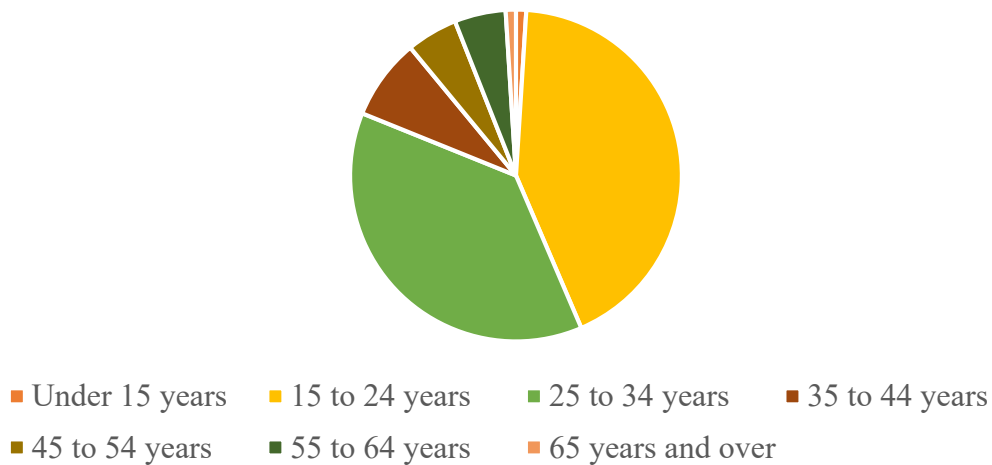
- ☐ < 500 €
- ☐ 501 € - 1000 €
- ☐ 1001 € - 1500 €
- ☐ 1501 € - 2000 €
- ☐ > 2000 €

### Appendix 3: Demographics

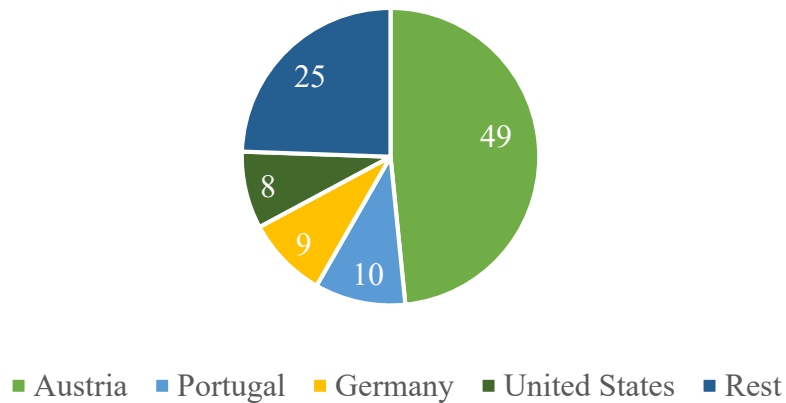
What is your gender (Numbers in %)



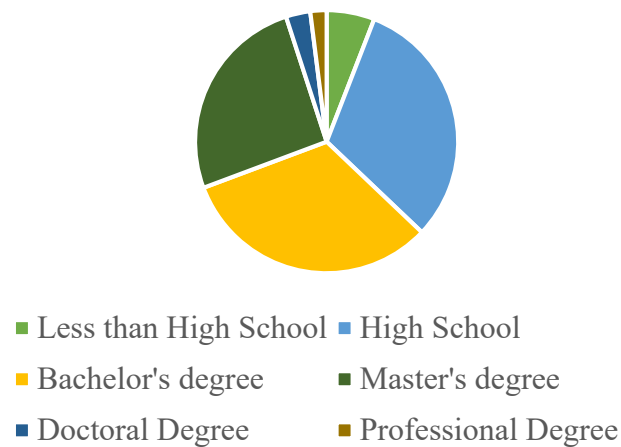
What is your age?



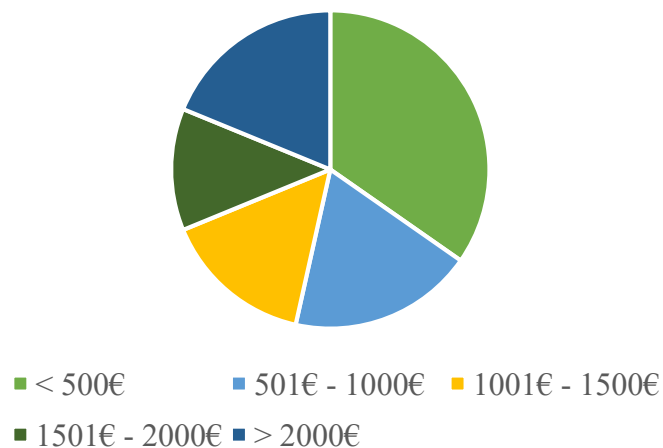
Where are you from? (Numbers in %)



What is the highest level of education you have completed? (Numbers in %)



What is your personal available monthly income?



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